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PCI #6

PATENT

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

Application No.: 10/520,815  
Filing Date: January 7, 2005  
PCT Appl. No.: PCT/JP2003/008552  
Applicant(s): Kohshi TAGUCHI et al.  
Group Art Unit: Unknown  
Examiner: Unknown  
Title: METHOD AND APPARATUS FOR FORMING SILICON  
NITRIDE FILM  
Attorney Docket: 2691-000013/US

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REQUEST FOR RECORDATION OF  
INTERNATIONAL PRELIMINARY EXAMINATION REPORT

Customer Service Window  
Randolph Building  
401 Dulany Street  
Alexandria, VA 22314  
Mail Stop PCT

April 11, 2005

Sir:

Applicants attach hereto an English translation of the International Preliminary Examination Report which was filed in the present application on January 7, 2005. Please make this document part of the prosecution history of the present application.

Respectfully submitted,

HARNESS, DICKY & PIERCE, P.L.C.

By:

  
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DJD/bof  
Attachment



Translation

## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 61997CT	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/JP2003/008552	International filing date (day/month/year) 04 July 2003 (04.07.2003)	Priority date (day/month/year) 08 July 2002 (08.07.2002)
International Patent Classification (IPC) or national classification and IPC H01L 21/31, 21/318, 21/205		
Applicant KANSAI TECHNOLOGY LICENSING ORGANIZATION CO.,LTD.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 3 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of \_\_\_\_\_ sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 04 November 2003 (04.11.2003)	Date of completion of this report 09 April 2004 (09.04.2004)
Name and mailing address of the IPEA/JP	Authorized officer
Facsimile No.	Telephone No.

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/JP2003/008552

## I. Basis of the report

## 1. With regard to the elements of the international application:\*

- ☒ the international application as originally filed
- ☐ the description:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the claims:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, as amended (together with any statement under Article 19  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the drawings:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the sequence listing part of the description:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

## 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

## 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/fig \_\_\_\_\_

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/JP 03/08552

## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. Statement

Novelty (N)	Claims	1 - 8	YES
	Claims		NO
Inventive step (IS)	Claims		YES
	Claims	1 - 8	NO
Industrial applicability (IA)	Claims	1 - 8	YES
	Claims		NO

## 2. Citations and explanations

Document 1: JP 5-263255 A (Hitachi Electronics Engineering Co., Ltd.), 12 October 1993

Document 2: EP 300447 A2 (Hitachi, Ltd.), 25 January 1989

The inventions set forth in claims 1 to 8 do not involve an inventive step in the light of documents 1 and 2 cited in the international search report.

Document 1 sets forth a method of forming a  $\text{Si}_3\text{N}_4$  film by plasma CVD, using hexamethyl disilazane and  $\text{NH}_3$  gas as raw materials.

Document 2 sets forth a plasma processing device provided with blow-out holes (35) which feed difficult-to-activate gas into an activation chamber (31), where said gas is activated, and activated reagent gas into the reaction chamber, and a gas supply port which supplies an easily activated gas.